

ABSTRACT OF THE DISCLOSURE

Disclosed is an apparatus for monitoring an optical signal-to-noise ratio in a WDM optical network. The apparatus includes an orthogonal polarization component module for receiving an optical signal and outputting it after removing a signal component thereof at a specific frequency band; and calculation means for measuring both average signal and noise component intensity of the optical signal outputted from the orthogonal polarization component module. By removing a signal component at a specific frequency bandwidth and passing only a noise component through, it is possible to easily measure the noise intensity within a signal bandwidth that cannot be measured in general. A frequency band is set within a signal bandwidth, and the signal intensity is minimized at the set frequency band, so that it is possible to measure the optical signal-to-noise ratio even for a signal whose amplified spontaneous emission noise spectrum is not flat, irrespective of the signal pattern length.